



AFRL-SA-WP-SR-2015-0019

DoD Global Laboratory- Based Influenza Surveillance Program End- of-Year Report, 2013-2014



Tiffany Parmis



July 2015

**Distribution A: Approved for public
release; distribution is unlimited.
Case Number: 88ABW-2015-2196,
1 May 2015**

STINFO COPY

**Air Force Research Laboratory
711th Human Performance Wing
U.S. Air Force School of Aerospace Medicine
Public Health & Preventive Medicine Dept
2510 Fifth St.
Wright-Patterson AFB, OH 45433-7913**

NOTICE AND SIGNATURE PAGE

Using Government drawings, specifications, or other data included in this document for any purpose other than Government procurement does not in any way obligate the U.S. Government. The fact that the Government formulated or supplied the drawings, specifications, or other data does not license the holder or any other person or corporation or convey any rights or permission to manufacture, use, or sell any patented invention that may relate to them.

Qualified requestors may obtain copies of this report from the Defense Technical Information Center (DTIC) (<http://www.dtic.mil>).

AFRL-SA-WP-SR-2015-0019 HAS BEEN REVIEWED AND IS APPROVED FOR PUBLICATION IN ACCORDANCE WITH ASSIGNED DISTRIBUTION STATEMENT.

//SIGNATURE//

LT COL MELINDA EATON
Chief, Epidemiology Consult Service

//SIGNATURE//

COL PAUL A. SJOBERG
Chair, Public Health & Preventive Med Dept

This report is published in the interest of scientific and technical information exchange, and its publication does not constitute the Government's approval or disapproval of its ideas or findings.

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 22 Jul 2015		2. REPORT TYPE Special Report		3. DATES COVERED (From – To) September 2013 – September 2014	
4. TITLE AND SUBTITLE DoD Global Laboratory-Based Influenza Surveillance Program End-of-Year Report, 2013-2014				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Tiffany Parmis				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) USAF School of Aerospace Medicine Public Health & Preventive Medicine Dept/PHR 2510 Fifth St. Wright-Patterson AFB, OH 45433-7913				8. PERFORMING ORGANIZATION REPORT NUMBER AFRL-SA-WP-SR-2015-0019	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSORING/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution A: Approved for public release; distribution is unlimited. Case Number: 88ABW-2015-2196, 1 May 2015					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT During the 2013-2014 influenza season (29 September 2013 - 27 September 2014), results were finalized for 3,871 specimens from 85 locations. There were 1,163 specimens positive for influenza (913 A(H1N1)pdm09, 122 A(H3N2), one A(H3N2)v, two A/not subtyped, 29 B/Victoria, 65 B/Yamagata, 22 B/unknown lineage, and nine influenza co-infections). See Table 2 on pages 4 & 5 for these results and other respiratory pathogens identified. Differences between specimens collected and tested are due to pending results and/or specimens sent for sequencing only. This is the cumulative report for specimens tested at USAFSAM during the 2013-2014 influenza season.					
15. SUBJECT TERMS Influenza, surveillance, USAF					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT SAR	18. NUMBER OF PAGES 11	19a. NAME OF RESPONSIBLE PERSON Tiffany Parmis
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U			19b. TELEPHONE NUMBER (include area code)

This page intentionally left blank

DoD Global Laboratory-Based Influenza Surveillance Program



USAF School of Aerospace Medicine

2013 - 2014

Cumulative Results

Season

Locations*	85
Collected	4,155
Tested*	3,870



Influenza A 1,046

A(H1N1)pdm09	913
A(H3N2)	122
A(H3N2)v	1
A(H1N1)pdm09 & Adenovirus	1
A(H1N1)pdm09 & Coronavirus	1
A(H1N1)pdm09 & Parainfluenza	2
A(H1N1)pdm09 & RSV	2
A(H1N1)pdm09 & Rhinovirus/Enterovirus	2
A/not subtyped	2

Influenza B 117

B & Coronavirus	1
B/Unknown [†] or pending lineage	22
B/Victoria	29
B/Yamagata	65

Other Respiratory Pathogens 1,485

Adenovirus	86
<i>Chlamydomydia pneumoniae</i>	32
Coronavirus	230
Human Metapneumovirus	143
<i>Mycoplasma pneumoniae</i>	53
Parainfluenza	89
RSV	189
Rhino/Enterovirus	491
Non-influenza Co-infections	172

*Does not include specimens for sequencing only and the locations they have been sent from.

[†]Unable to determine lineage.

Lab data are current as of 20 October 2014. Results are preliminary and may change as more results are received.

Respiratory Highlights 2013-2014 Influenza Season (29 September 2013 - 27 September 2014)

- During the 2013-2014 influenza season (29 September 2013 - 27 September 2014), results were finalized for 3,871 specimens from 85 locations. There were 1,163 specimens positive for influenza (913 A(H1N1)pdm09, 122 A(H3N2), one A(H3N2)v, two A/not subtyped, 29 B/Victoria, 65 B/Yamagata, 22 B/unknown lineage, and nine influenza co-infections). See Table 2 on pages 4 & 5 for these results and other respiratory pathogens identified. Differences between specimens collected and tested are due to pending results and/or specimens sent for sequencing only.

- This is the cumulative report for specimens tested at USAFSAM during the 2013-2014 influenza season.

Table 1. ILI by age group for the 2013-2014 surveillance year

Age Group	Frequency	Percent
0-5	774	20.00
6-9	218	5.63
10-18	331	8.55
19-24	561	14.50
25-44	1413	36.51
45-64	451	11.65
65+	102	2.64
Unknown	20	0.52

Demographic Summary

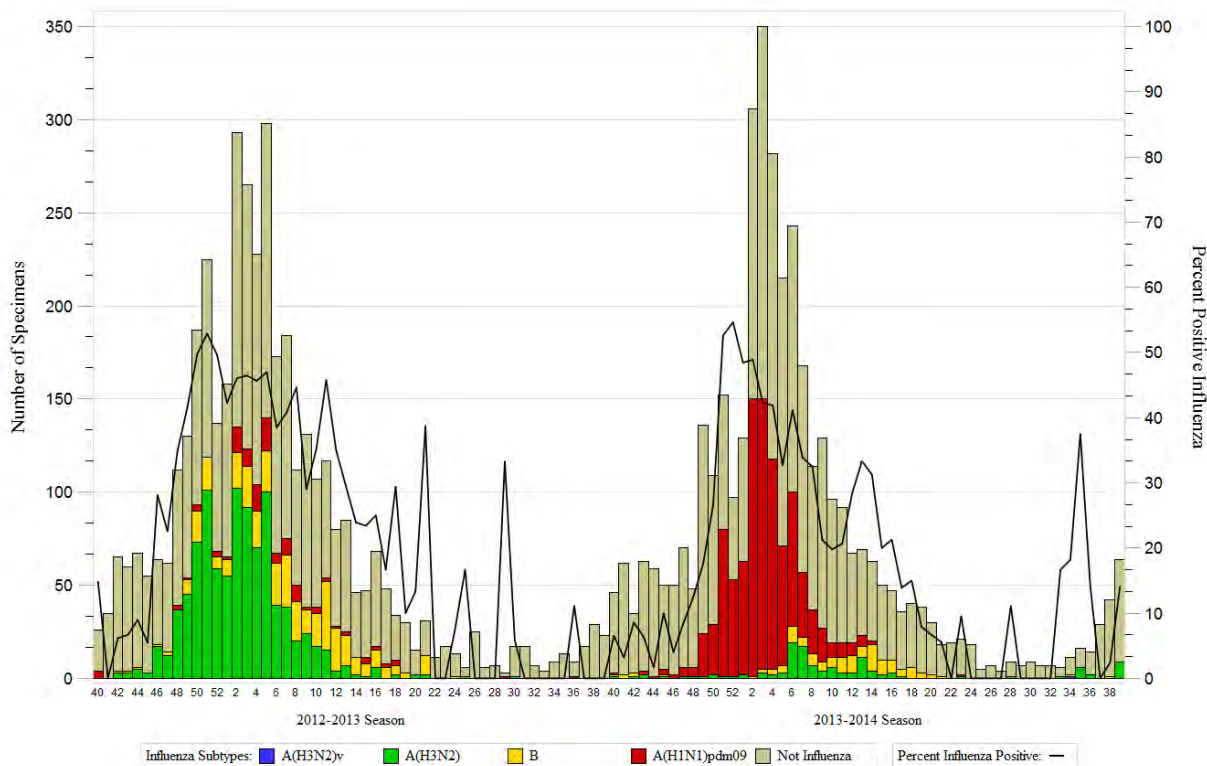
Of 3,870 ILI cases, 1,604 are service members (41.4%), 1,288 are children (33.3%), 691 (17.9%) are spouses, and 287 (7.4%) are retirees & other beneficiaries. There are no unknown beneficiary types. The median age of ILI cases with known age (n=3,851) is 25.0 (range 0, 98) and 1,323 (34.2%) of these specimens are from ILI cases 18 years of age or younger.

Table of Contents

Respiratory Highlights	Page 1
Demographic Summary	Page 1
Laboratory Results - Cumulative for Season	Pages 2 & 3
Vaccination Status by Beneficiary Type	Page 3
Cumulative Results by Region and Location	Pages 4 & 5
Cumulative Non-Influenza Co-Infection Results	Page 6
DoD Global Laboratory-Based Influenza Surveillance Program Background	Page 7

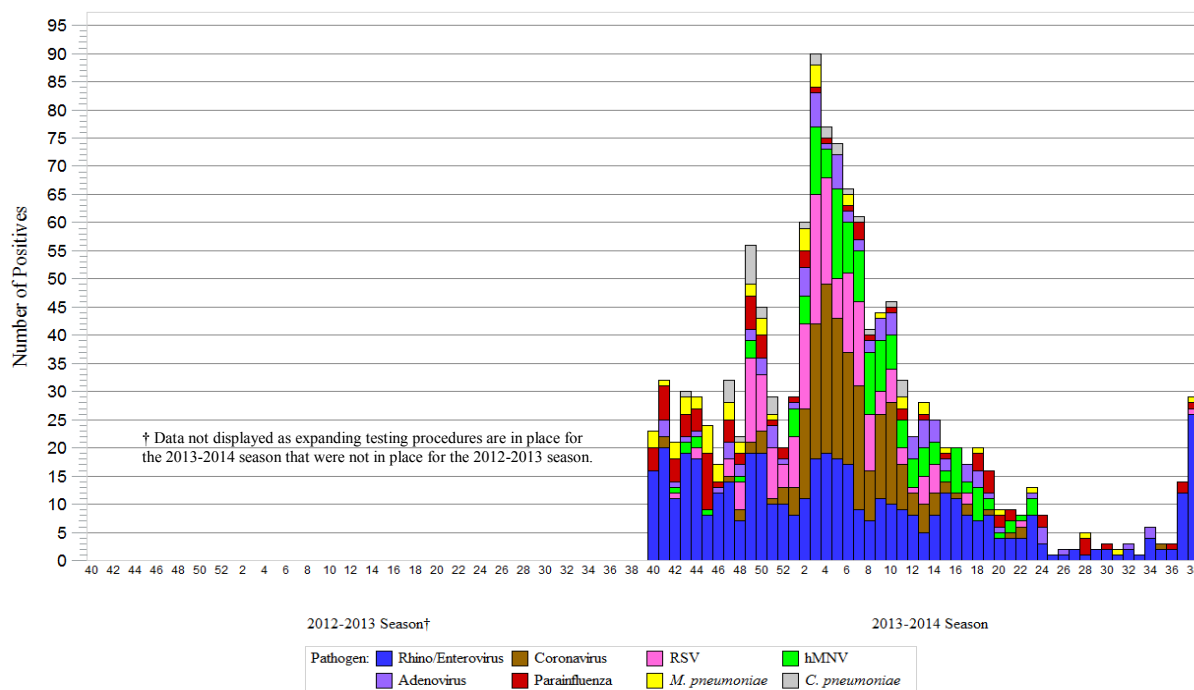
Laboratory Results - Cumulative for Season

Graph 1. Percent influenza positive by week for the 2013-2014 surveillance year



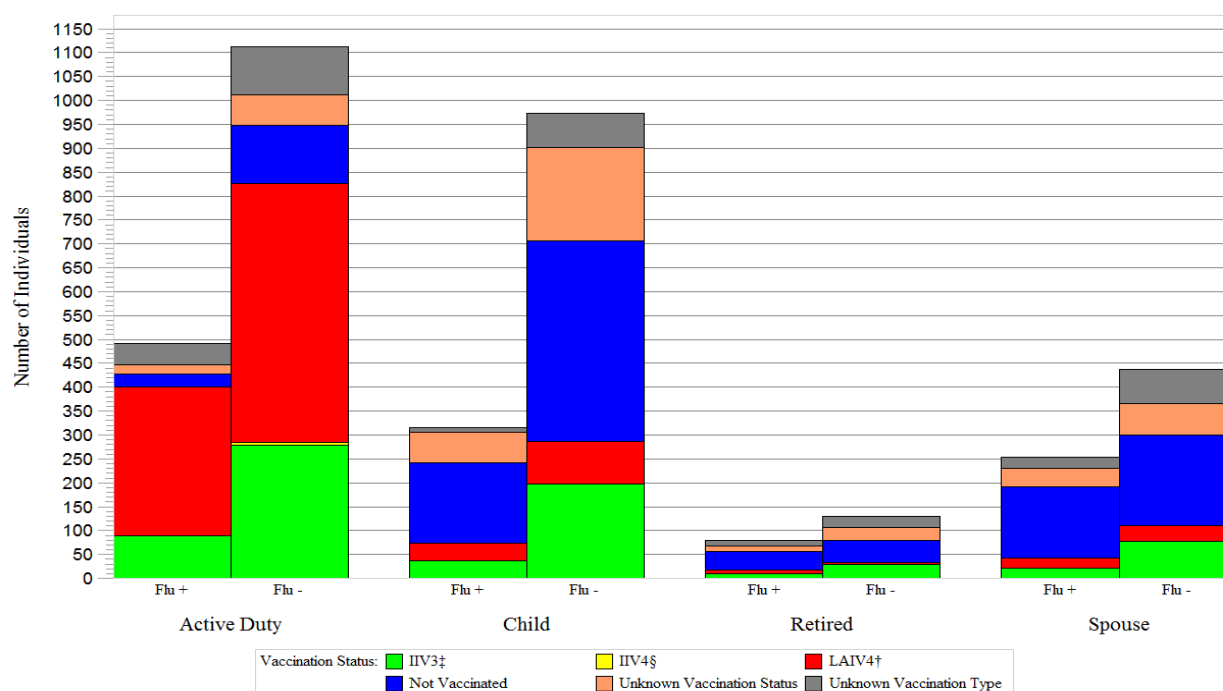
Last season, there were five influenza A specimens not subtyped and a total of seven influenza co-infections. This season there are two influenza A/not subtyped & nine influenza co-infections. These infections are not included in the graph.

Graph 2. Other respiratory pathogen results by week for the 2013-2014 surveillance year



This season there are a total of 181 co-infections. These infections are not included in the graph.

Graph 3. Vaccination status by beneficiary type for the 2013-2014 surveillance year

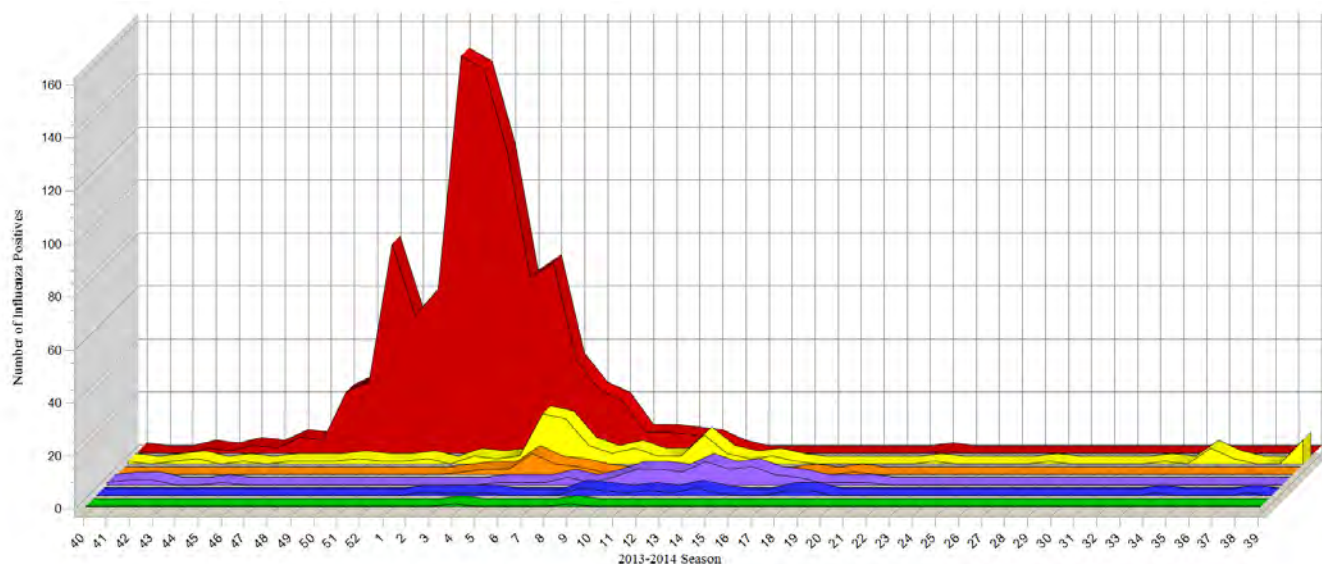


‡ Influenza Injectable Vaccine (trivalent)

§ Influenza Injectable Vaccine (quadrivalent)

† Live Attenuated Influenza Vaccine (quadrivalent)

Graph 4. Influenza subtype trends by week for the 2013-2014 surveillance year

[illegible]

This season one influenza A(H3N2)v was identified. It is not included in the graph.

Laboratory Results—2013-2014 surveillance year

Table 2. Cumulative results by region and location

Region*		A(H1N1)pdm09	A(H3N2)	A(H3N2)v	A/not subtyped	A(H1N1)pdm09 & Adeno	A(H1N1)pdm09 & Corona	A(H1N1)pdm09 & Para	A(H1N1)pdm09 & RSV	A(H1N1)pdm09 & Rhino/Entero	B	B/Victoria	B/Yamagata	B & Corona	Adenovirus	C. pneumoniae	Coronavirus	hMPV	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Non-Influenza Co-Infection **	No Pathogen	Total
Deployed	Country 1, Location A	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	3
	Country 1, Location B	-	6	-	-	-	-	-	-	-	-	-	5	-	-	-	2	1	1	-	2	7	-	12	36
	Country 1, Location D	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	4	16
	Country 7, Location A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	3
PACOM	CFA Okinawa, Japan	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	2	12	25
	Camp Zama, Japan	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Eielson AFB, AK	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	2	-	2	1	15
	JB Elmendorf-Richardson, AK	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	5	-	7	22
	JR Marianas (Andersen AFB), Guam	9	4	-	-	-	-	-	-	-	1	-	-	-	9	-	2	4	6	3	1	10	2	27	78
	Kadena AB, Japan	6	1	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	2	-	1	-	3	15
	Kunsan AB, South Korea	2	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	22
	Misawa AB, Japan	-	-	-	-	-	-	-	-	-	3	-	11	-	1	-	2	1	2	8	-	8	6	11	53
	Osan AB, South Korea	7	12	-	-	-	-	-	-	-	-	4	-	-	1	-	-	2	-	1	1	3	2	7	40
	Tripler AMC, HI	10	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	5	17
	Yokota AB, Japan	9	10	-	-	-	-	1	-	-	3	12	3	-	-	-	-	-	-	-	1	-	2	2	7
Region 1	Hanscom AFB, MA	16	4	-	-	-	-	-	-	-	1	4	-	1	-	6	6	-	1	2	3	-	26	70	
	USCG Academy, CT	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	-	-	-	2	-	-	7
Region 2	Ft Drum, NY	34	1	-	-	-	-	1	-	-	-	4	-	2	-	5	4	-	1	16	13	7	16	104	
	JB McGuire-Dix-Lakehurst, NJ	11	2	-	1	-	-	1	-	-	-	3	-	-	1	4	1	-	-	3	7	1	13	48	
	West Point USMA, NY	46	4	-	-	-	-	-	-	3	-	12	1	8	-	13	11	1	10	5	26	9	84	233	
Region 3	CG Base Portsmouth, VA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	4	
	Dover AFB, DE	13	1	-	-	-	-	-	-	-	-	1	-	-	-	2	-	-	2	-	2	-	6	27	
	JB Anacostia-Bolling, DC	3	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-	1	1	2	2	1	3	16	
	JB Andrews, MD	5	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	5	12	
	JB Langley-Eustis, VA	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	13	2	4	26	
	NMC Portsmouth, VA	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	2	
	WRNMMC, MD	6	1	-	-	-	-	-	-	-	-	-	-	-	1	-	3	-	-	-	1	7	1	13	33
Region 4	CGS Mobile, AL	2	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	3	-	-	-	2	1	2	12
	Camp Lejeune, NC	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	5	
	Columbus AFB, MS	15	1	-	-	-	-	-	-	-	-	-	-	-	-	1	4	3	2	1	-	7	-	26	60
	Eglin AFB, FL	16	-	-	-	-	-	-	1	-	-	-	-	5	-	8	5	-	1	13	35	15	38	137	
	Ft Bragg, NC	19	2	-	-	-	-	-	-	-	-	3	-	1	1	5	2	-	3	16	19	6	35	112	
	Ft Campbell, KY	20	4	-	-	-	-	-	-	-	-	-	-	2	-	2	1	-	4	9	1	33	76		
	Hurlburt Field, FL	12	-	-	-	-	-	-	-	1	-	-	-	1	-	6	2	1	1	4	10	3	25	66	
	JB Charleston (AF), SC	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	5	
	JB Charleston (Navy), SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Keesler AFB, MS	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	8	13
	MacDill AFB, FL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	3	8	
	Maxwell AFB, AL	10	1	-	-	-	-	-	-	-	-	2	-	1	-	3	1	-	-	1	8	2	19	48	
	Moody AFB, GA	9	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	3	1	6	5	16	42	
	NH Beaufort, SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	7	2	6	16
	NH Jacksonville, FL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Patrick AFB, FL	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	3
	Robins AFB, GA	8	1	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	1	-	1	7	1	13	35
	Seymour Johnson AFB, NC	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	3	-	14	26
	Shaw AFB, SC	9	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	1	-	1	2	3	18
	Tyndall AFB, FL	14	1	-	-	-	-	1	1	-	-	-	-	-	3	-	7	-	1	3	10	10	2	12	65
	USCG Base Elizabeth City, NC	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

*US Regions are based on Health & Human Services regions. Other locations are defined by Cocom.

** Refer to Table 3 for more detailed information on non-influenza co-infections.

Continued on page 5

Laboratory Results—2013-2014 surveillance year

Table 2. Cumulative results by region and location (continued from page 4)

Region*		A(H1N1)pdm09	A(H3N2)	A(H3N2)v	A/not subtyped	A(H1N1)pdm09 & Adeno	A(H1N1)pdm09 & Corona	A(H1N1)pdm09 & Para	A(H1N1)pdm09 & RSV	A(H1N1)pdm09 & Rhino/Entero	B	B/Victoria	B/Yamagata	B & Corona	Adenovirus	C. pneumoniae	Coronavirus	hMPV	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Non-Influenza Co-Infection **	No Pathogen	Total	
Region 5	Scott AFB, IL	20	2	-	-	-	-	-	-	-	-	-	1	-	-	-	5	2	8	1	2	5	-	16	62	
	USCG Air Station Traverse City, MI	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Wright-Patterson AFB, OH	38	1	1	-	-	-	-	-	-	-	-	3	-	5	-	5	6	3	3	3	15	4	39	126	
Region 6	Altus AFB, OK	21	-	-	-	-	-	-	-	-	-	-	1	-	1	-	11	7	-	-	10	17	11	45	124	
	Barksdale AFB, LA	30	-	-	-	-	-	-	-	-	-	-	1	-	-	-	6	3	-	-	1	3	1	15	60	
	Cannon AFB, NM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	4	3	2	4	14	
	Ft Bliss, TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
	Ft Hood, TX	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	2	4	-	8	29	
	Laughlin AFB, TX	12	1	-	-	-	-	-	-	-	-	-	-	-	1	-	3	-	1	2	3	4	3	10	40	
	Little Rock AFB, AR	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	4	8	
	Sheppard AFB, TX	63	-	-	-	-	-	-	-	-	-	1	-	-	7	-	24	4	2	2	5	19	5	74	206	
	Tinker AFB, OK	50	8	-	-	-	-	-	-	-	1	-	-	-	2	-	11	5	1	-	6	23	7	48	162	
Region 7	Ft Leavenworth, KS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
	McConnell AFB, KS	21	2	-	-	-	-	-	-	-	-	1	-	-	3	-	4	1	1	3	5	8	2	24	75	
	Offutt AFB, NE	14	3	-	-	-	1	-	-	-	-	-	-	-	1	-	11	-	6	2	-	10	2	18	68	
	Whiteman AFB, MO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	
Region 8	Ellsworth AFB, SD	24	-	-	-	-	-	-	-	-	1	-	-	-	2	-	2	5	1	3	4	5	4	24	75	
	FE Warren AFB, WY	19	-	-	-	-	-	-	-	-	-	2	1	-	2	-	4	3	2	1	2	6	3	20	65	
	Hill AFB, UT	19	-	-	-	-	-	-	-	-	-	-	1	-	2	-	3	2	-	1	1	8	1	15	53	
	Malmstrom AFB, MT	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	5	
	Minot AFB, ND	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	4	25	
	Peterson AFB, CO	26	4	-	-	-	-	-	-	-	-	1	-	-	1	-	5	2	2	2	3	11	5	17	79	
	USAF Academy, CO	13	1	-	-	-	-	-	-	-	-	-	-	-	1	28	1	-	-	-	1	2	4	32	83	
Region 9	Beale AFB, CA	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	-	1	-	3	8	
	CGS Petaluma, CA	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
	Davis-Monthan AFB, AZ	10	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	1	1	3	4	6	10	43	
	Edwards AFB, CA	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	1	-	4	14	
	Los Angeles AFB, CA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	
	Luke AFB, AZ	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	2	-	7	26	
	NH Lemoore, CA	5	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	1	-	1	3	12	
	Nellis AFB, NV	14	-	-	-	-	-	-	-	-	-	1	1	-	1	-	5	10	1	2	9	13	4	19	80	
	Travis AFB, CA	59	4	-	-	1	-	-	-	-	1	4	2	-	6	1	16	22	3	8	10	40	11	116	304	
	USCG Island Alameda, CA	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
	Vandenberg AFB, CA	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	3	1	5	13	
Region 10	Fairchild AFB, WA	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	2	1	6	16	
	Mt Home AFB, ID	3	-	-	-	-	-	-	-	-	1	-	-	-	-	-	3	2	1	2	1	4	1	18	36	
	NH Bremerton, WA	39	5	-	1	-	-	-	-	-	3	1	3	-	10	-	11	11	1	2	14	27	10	80	218	
Total		913	122	1	2	1	1	2	2	2	22	29	65	1	86	32	230	143	53	89	189	491	172	1222	3870	

*US Regions are based on Health & Human Services regions. Other locations are defined by COCOM.

** Refer to Table 3 for more detailed information on non-influenza co-infections.

Laboratory Results—2013-2014 surveillance year

Table 3. Cumulative non-influenza co-infection results by region and location

Region*		Adeno & C. pneumoniae	Adeno & C. pneumoniae & Rhino/Entero	Adeno & Corona	Adeno & Corona & hMVN	Adeno & Corona & RSV & Rhino/Entero	Adeno & Corona & Rhino/Entero	Adeno & hMVN	Adeno & hMVN & Rhino/Entero	Adeno & Para	Adeno & Para & Rhino/Entero	Adeno & RSV	Adeno & RSV & Rhino/Entero	Adeno & Rhino/Entero	B. pertussis & Rhino/Entero	B. pertussis & hMVN	C. pneumoniae & Rhino/Entero	Coronavirus & hMVN	Coronavirus & hMVN & Rhino/Entero	Coronavirus & Para	Coronavirus & Para & Rhino/Entero	Coronavirus & RSV	Coronavirus & Rhino/Entero	hMVN & Parainfluenza & Rhino/Entero	hMVN & RSV	hMVN & Rhino/Entero	M. pneumoniae & Rhino/Entero	Parainfluenza & RSV	Parainfluenza & Rhino/Entero	Parainfluenza & RSV & Rhino/Entero	RSV & Rhino/Entero	Total		
PACOM	CFA Okinawa, Japan	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	2	
	Eielson AFB, AK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2		
	JR Marianas (Andersen AFB), Guam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	2		
	Misawa AB, Japan	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	1	6	
	Osan AB, South Korea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	
	Yokota AB, Japan	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	
Region 2	Ft Drum, NY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	2	-	-	-	-	1	1	7
	JB McGuire-Dix-Lakehurst, NJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1		
	West Point USMA, NY	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	-	-	-	-	2	9
Region 3	CG Base Portsmouth, VA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	
	JB Anacostia-Bolling, DC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	
	JB Langley-Eustis, VA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	
	WRNMMC, MD	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Region 4	CGS Mobile, AL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Eglin AFB, FL	-	-	-	-	-	-	1	-	1	-	-	2	-	-	-	-	1	-	-	-	1	-	1	-	-	-	1	-	2	-	5	15	
	Ft Bragg, NC	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	-	2	6	
	Ft Campbell, KY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
	Hurlburt Field, FL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	1	3	
	Keesler AFB, MS	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	MacDill AFB, FL	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	
	Maxwell AFB, AL	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	
	Moody AFB, GA	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	2	5	
	NH Beaufort, SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	2	
	Robins AFB, GA	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Shaw AFB, SC	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Tyndall AFB, FL	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	
Region 5	Wright-Patterson AFB, OH	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	
Region 6	Altus AFB, OK	-	-	-	-	-	2	1	-	-	1	-	1	-	-	-	-	1	1	-	-	-	-	1	-	-	1	-	-	-	-	2	11	
	Barksdale AFB, LA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	
	Cannon AFB, NM	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	
	Laughlin AFB, TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
	Sheppard AFB, TX	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	5
	Tinker AFB, OK	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	3	7
Region 7	McConnell AFB, KS	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	
	Offutt AFB, NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	
	Whiteman AFB, MO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	
Region 8	Ellsworth AFB, SD	-	-	1	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	4
	FE Warren AFB, WY	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
	Hill AFB, UT	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Peterson AFB, CO	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	5	
	USAF Academy, CO	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Region 9	Davis-Monthan AFB, AZ	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	6
	NH Lemoore, CA	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	Nellis AFB, NV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	1	4	
	Travis AFB, CA	-	-	1	-	-	-	-	1	-	-	-	2	-	1	-	-	-	-	-	-	-	-	1	-	-	1	-	-	2	-	2	11	
	Vandenberg AFB, CA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
Region 10	Fairchild AFB, WA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	
	Mt Home AFB, ID	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	NH Bremerton, WA	-	-	-	-	-	-	-	-	-	1	1	-	4	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	1	10
Total		1	1	10	1	1	2	5	1	3	2	9	1	23	1	1	2	7	1	1	1	13	17	2	4	10	5	1	10	1	35	17	12	

*US Regions are based on Health & Human Services regions. Other locations are defined by COCOM.

DoD Global Laboratory-Based Influenza Surveillance Program



USAF School of Aerospace Medicine

2013 - 2014

Respiratory Surveillance
2013-2014 Year
(beginning 29 September 2013)



USAF School of Aerospace Medicine

2510 5th Street, Bldg 20840
Wright-Patterson AFB, OH
45433-7913

For Public Health Services
937-938-3196; DSN 798-3196

For Laboratory Services
937-938-3163; DSN 798-3163

E-mail
USAFSAM.PHRFlu@us.af.mil



Contributions to the CDC for National Influenza Surveillance

All sequence data are sent to the CDC and selected original specimens or isolates are sent for further characterization and possible use as influenza vaccine seed viruses. Specimens may also undergo antiviral testing.

DoD Global Influenza Surveillance Program

<https://gumbo2.wpafb.af.mil/epi-consult/Influenza/>

Background

The DoD-wide program was established by the Global Emerging Infections Surveillance and Response System (GEIS) in 1997. The surveillance network includes the US Air Force School of Aerospace Medicine (USAFSAM) (sentinel site respiratory surveillance), the Naval Health Research Center (recruit and shipboard population-based respiratory surveillance), the Naval Medical Research Unit (NAMRU-3) in Cairo, Egypt, the Naval Medical Research Unit (NAMRU-2) in Phnom Penh, Cambodia, the Armed Forces Research Institute of Medical Sciences (AFRIMS) in Bangkok, Thailand, the Naval Medical Research Unit-6 (NAMRU-6) in Lima, Peru, and the United States Army Medical Research Unit-Kenya (USAMRU-K) located in Nairobi, Kenya. This work is supported by the Air Force and the Division of Global Emerging Infections Surveillance and Response System (GEIS) Operations, a Division of the Armed Forces Health Surveillance Center (AFHSC).

Sentinel Site Surveillance at USAFSAM

In 1976, the US Air Force Medical Service began conducting routine, global, laboratory-based influenza surveillance. Air Force efforts expanded to DoD-wide in 1997. USAFSAM manages the surveillance program that includes global surveillance among DoD beneficiaries at over 80 sentinel sites (including deployed locations) and many non-sentinel sites (please see map on the left). Unique sentinel sites include three DoD overseas medical research laboratories (AFRIMS, NAMRU-6, USAMRU-K) and the US Army Public Health Command Region South (PHCR-S). These sites collect specimens from local residents in surrounding countries that may not otherwise be covered in existing surveillance efforts.

Since the 2006-2007 season, Landstuhl Regional Medical Center (LRMC) has served EUCOM as a USAFSAM contributing laboratory. The initiative seeks to provide more timely results and efficient transport of specimens.

For an expanded view of this report, visit our website. Also available on the website is a list of previous weekly surveillance reports, program information (including an educational briefing and instruction pamphlets for clinic staff), and an overview of historical data. Please visit the AFHSC/GEIS website for an overview of influenza surveillance at all collaborating organizations.

Errata: Three specimens were incorrectly included in prior reports this season; they were later deleted from laboratory data. Additionally, the number of locations on page 1 was changed to exclude locations submitting specimens for sequencing only. We regret the errors.

Collaborating Partners

In addition to all participating DoD military sentinel sites, several collaborating partners (described above) may be further understood by reviewing the partner's website.



Distribution Statement A: Distribution is unlimited. 88ABW-2015-2196 and PA email guidance dated 1 May 2015.

Email: USAFSAM.PHRFlu@us.af.mil, <https://gumbo2.area52.afnoapps.usaf.mil/epi-consult/influenza>